

Abstract of the Disclosure:

A reflective optical mirror for semiconductor fabrication includes a capping layer above a reflective multilayer sequence. A doping is provided for the capping layer and an artificial oxide layer is grown on the capping layer with the aid of hydrogen peroxide, in particular in the presence of a catalyst. The artificially grown oxide layer is more homogeneous than a naturally grown oxide and thereby improves optical properties of the mirror during a lithographic exposure of semiconductor products.

15

20

LAG/nt